

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE.

FRANCIS A. WALKER, Superintendent,
Appointed April 1, 1879; resigned November 3, 1881.

CHAS. W. SEATON, Superintendent,
Appointed November 4, 1881. Office of Superintendent
abolished March 3, 1885.

REPORT

ON THE

SOCIAL STATISTICS OF CITIES,

COMPILED BY

GEORGE E. WARING, Jr.,
EXPERT AND SPECIAL AGENT.

PART I.

THE NEW ENGLAND AND THE MIDDLE STATES.

PART II.

THE SOUTHERN AND THE WESTERN STATES.

PART I.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.

1886.

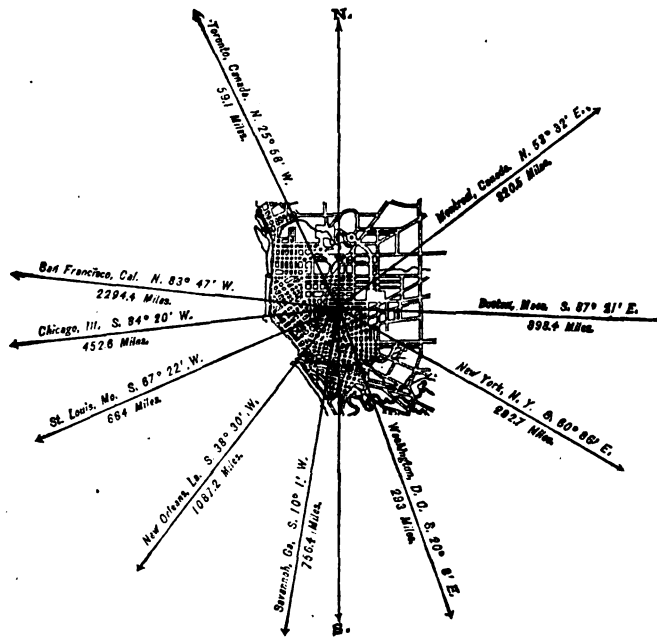
BUFFALO,

ERIE COUNTY, NEW YORK.

POPULATION

IN THE
AGGREGATE,
1830-1880.

	Inhab.
1790.....
1800.....
1810.....
1820.....
1830.....	8, 663
1840.....	18, 213
1850.....	42, 261
1860.....	81, 129
1870.....	117, 714
1880.....	155, 134



POPULATION

BY
SEX, NATIVITY, AND RACE,
AT
CENSUS OF 1880.

Male.....	76, 904
Female.....	78, 230
—	
Native.....	103, 866
Foreign-born.....	51, 268
—	
White.....	154, 268
Colored.....	* 866
* Including 5 Chinese and 4 Indians.	

Latitude : 42° 53' North ; Longitude : 78° 52' (west from Greenwich) ; Altitude : 573 to 633 feet.

FINANCIAL CONDITION :

Total Valuation : \$83,910,583 ; per capita : \$541 00. Net Indebtedness : \$8,211,934 ; per capita : \$52 93. Tax per \$100 : \$1 87.

HISTORICAL SKETCH.

The first Europeans who visited the region about the Niagara river found there an Indian tribe known as the Kaw-quaws. At this period, soon after the year 1600, they were settled in several villages about the foot of lake Erie, upon both sides of the river, and numbered about 12,000 souls. It is not likely that any of these villages occupied the site of the present city of Buffalo, since they were generally located some miles from navigable water, in order that they might not be exposed to the sudden attacks of their enemies. The early French missionaries gave this people the name of the "Nutre" nation, because they were of a peaceful disposition and tried to keep at peace with the warlike tribes which surrounded them on all sides. To the northwest, around the lake of that name, were the Hurons; to the southwest were the Erie or Cat nation, and to the east were the terrible Iroquois. In the

attempt to maintain a strict neutrality between the Iroquois on the one side, and the western nations, with whom the Iroquois were constantly at war, on the other, the Kaw-quaws were ultimately nearly destroyed. Tradition says that a last decisive battle between them and the Iroquois was fought about 1643 on Buffalo creek, at a spot near the old council and mission houses, 6 miles above where Buffalo now stands. The conquest of the Kaw-quaws was followed ten years later by the complete overthrow of the Eries in a desperate battle fought about midway between Canandaigua lake and the Genesee river. About the same time the Hurons succumbed to the prowess of the Iroquois, leaving the latter tribe undisputed masters of all the territory now included in New York, Pennsylvania, Ohio, and Canada. From that time on they extended their conquests, until, at its height, their power reached to the Mississippi on the west and to the gulf of Mexico on the south.

The Iroquois originally constituted but five communities, viz, the Mohawks, whose principal towns were adjacent to the Mohawk river; the Oneidas, in the vicinity of Oneida lake; the Onondagas, near Onondaga lake; the Cayugas, on Cayuga lake; and the Senecas, whose territory after the conquest of the Kaw-quaws and the Eries comprehended all that region which lay west of Seneca lake, and which was denominated "the Genesee country". In the year 1712 the Tuscaroras were taken into the confederacy, and given a territory by the Oneidas, adjoining that of the Onondaga tribe. According to a report made to Governor Tryon, October 22, 1723, the Six Nations, as they were called by the English, numbered about 2,000 fighting men, making at least 10,000 souls in all, the Senecas alone comprising half that number. It was a most fortunate thing for the English colonists in America that from the outset this powerful confederacy was friendly to them, for it served as an effectual shield against the hostile incursions of the French and their savage allies. Their war with the French began with Champlain, and continued with few intervals till the peace of Paris in 1763, when France finally lost control over Canada.

Up to this time western New York had formed a portion of French Canada, or, using a more geographical designation, New France. The progress of colonization here, as in all the northern portion of the continent, had been very slow, and, with the exception of trading-posts scattered along at rare intervals from Quebec to New Orleans, the whole country was an unbroken wilderness. Even under English rule but little progress was made, and the revolutionary war found few settlers along the chain of the great lakes. A few forts, however, had been built, which were found to be of invaluable assistance to the British, furnishing not only a safe refuge to many Tories who fled from the colonies, but also convenient starting-points for the expeditions sent out against the border settlements. In this, as in all preceding contests, the Six Nations remained true to their old allies, the British, and, in conjunction with the tory refugees, maintained a border warfare which, for atrocious acts of cruelty, has never been surpassed in the annals of the world. Scarcely a hamlet was spared the loss of some of its citizens. Scarcely a family but mourned the death or captivity of some loved member. The massacres of Wyoming and Cherry Valley were only the most famous of these acts. So horrible did they become that in the summer of 1779 Congress determined to put a stop to them if possible, and to this end sent a combined army of nearly 5,000 men, under General Sullivan, into the heart of the Indian country, with orders to destroy their villages, cut down their crops, and inflict upon them every other mischief which time and circumstances would permit. These instructions were carried out to the letter, and a blow was inflicted upon the Iroquois from which they never recovered.

Although all the Six Nations suffered terribly from this campaign, the Senecas were by far the most injured. Their towns were all destroyed, together with all the provisions they had provided for their winter consumption, and they were driven to the necessity of fleeing to their friends, the British, at Niagara. Great numbers of them actually perished, during the winter of 1779-80, from starvation and exposure, and from disease induced thereby. They appear to have been provided for at Niagara, but with great difficulty. This led, in the following spring, to active efforts on the part of the officers of the post, under instructions from the British government, to induce them to settle upon lands where they might support themselves by hunting, and raising corn, beans, and such other vegetables as their rude mode of cultivation might enable them to produce. To this end they were located at Buffalo creek, Cattaraugus creek, Tonawanda creek, Alleghany, Nunda, and two or three points on the Genesee river. Naturally they expected to be sustained at the settlements by material aid from the British government, and it was common for some officer or agent of the government to reside at the most important of the new villages. The agent at Buffalo creek seems to have been one William Johnson, who, with Captain Powell and others, came there in the spring of 1780 with hoes, axes, seeds, etc., and by their advice and encouragement assisted the Indians materially in establishing themselves in their new homes. These first inhabitants of Buffalo were mainly of the Seneca tribe, though some Onondagas and Cayugas were of the number. The first permanent settlement is said to have been made by the Seneca chief, Old King, and his family, among whom was a daughter who had married Rowland Montour, a son of the Catharine Montour so famous in the history of these times.

There has been much discussion as to the origin of the name "Buffalo creek" which the English gave to this settlement, but the weight of opinion seems to be in favor of its derivation from the animal of that name, which is supposed in old times to have made regular visits to a "salt lick" on the banks of the creeks, above the site of the present city. The buffalo was formerly found throughout the whole territory of the United States, with the exception of that part east of the Hudson river and lake Champlain, and of narrow strips on the Atlantic and the gulf of Mexico. Before the Europeans came here the country was for the most part an open prairie, produced by the periodical burning over of immense tracts of country by the native inhabitants. All those regions denominated

"oak openings" were once of this prairie character, and furnished feeding-ground for immense herds of buffalo. There is abundant evidence that this animal was found along the south shores of lake Erie as late as the middle of the last century, but that he was ever seen around Buffalo creek by white men is not at all probable. The bleaching bones were left around the "salt lick" on the banks of the creek, and the Indians called the stream "*Tick-e-ack-gou-ga-haunda*", or, in English, "Buffalo creek". To the village they applied the name "*Te-osah-way*", or, in our language, "place of basswood", owing to the existence of that tree there. The whole locality was known and designated by the English as "Buffalo creek" certainly as early as 1784, as the name was used in the treaty made with the Six Nations at fort Stanwix in that year. The word "creek" was dropped from the title of the settlement about the beginning of the present century. An attempt to change it to "New Amsterdam" about the same time was unsuccessful. Up to 1811 it was spelled "Buffaloe", but the ridicule of the editor of the newly established *Buffalo Gazette* soon caused the superfluous letter to be dropped. Since then the name of "Buffalo" has been undisturbed.

∕ The settlement of the Indians here grew with the Indian traders, and other white men who had associated themselves with the Indians, and it is easy to see that the early white population was of a very mixed character. The first of the traders was one Cornelius Winney, who had his trading-house "at the lake", upon the banks of the Little Buffalo creek (now Hamburg canal), nearly at the junction of the present Washington and Quay streets. This was the first building erected by civilized man in Buffalo, and Winney may be considered the first white resident. He probably came here to reside about 1783-'84, and he remained until after the surrender of fort Niagara to the Americans in 1796. For a long time his was the only house in the settlement. A visitor in 1792 speaks of the place as follows:

There was but one white man there. I think his name was Winney, an Indian trader. His building stood first as you descend from the high ground. He had rum, whisky, Indian knives, trinkets, etc. His house was full of Indians. They looked at us with a good deal of curiosity. We had but a poor night's rest. The Indians were in and out all night, getting liquor.

In 1795, according to Judge Porter, there were three houses in the settlement, "Johnston's, Winney's, and a Dutchman by the name of Middaugh".

From the close of the revolutionary war to the time of the delivery of the forts upon the northern and northwestern frontiers Buffalo creek and the territory around it was subject to the authority of the British. Their claim to jurisdiction was acknowledged without question both by white and by Indian settlers, inasmuch as the settlement had been founded under the patronage of the English government and was wholly dependent upon it for protection, and even for subsistence, since most of its supplies came from fort Erie, on the other side of the lake. With the transfer of the forts on the American side of the great lakes and their connections to the United States in 1796, Buffalo creek came under the control of the United States, though it was still more or less dependent on the British. Their right to the whole of western New York being now undisputed, the Americans began to colonize it in large numbers, and settlements sprang up in many places.

The original charters of Massachusetts and Connecticut included all the lands within certain parallels running due west from the Atlantic to the Pacific. At the same time, the charter of New York covered all the land within the present limits of the state. It is supposed that Massachusetts, previous to the war of the Revolution, gave up the rights and jurisdiction which she claimed under her charter over that portion of New York bounded east by the present dividing-line between New York and Massachusetts, and west by a line so far west of the Hudson as to include all the settlements previously made. As to the territory west of this, apparently no understanding existed, and after the war Massachusetts revived her claim to it. On the 16th of December, 1786, the matter was amicably settled by commissioners at Hartford, Connecticut, an agreement being entered into that confirmed the sovereignty and right of jurisdiction over the whole territory to New York, while it conceded to Massachusetts the right of pre-emption from the Indians of that soil, broadly speaking, west of a line running due north and south through Seneca lake; from this was excepted a strip 1 mile in width running the whole length of the Niagara river (known afterward as the New York reservation), the pre-emption of which was vested in New York. The Indian title was gradually extinguished by treaties made from time to time.

The lands embraced in the cession to Massachusetts by New York were very shortly purchased by a company of which Messrs. Phelps and Gorham were the leaders. In July, 1788, Mr. Phelps bought part of the lands from the Indians. This company had predicated its purchase on its ability to buy the depreciated public paper of the state at a large discount; but the funding of the public debt of the state by the federal government enhanced the value of the state debt to nearly par, and the company was obliged to report to the legislature, in the spring of 1789, its inability to fulfill its engagements, and to ask to be released from so much of its obligation as related to the Indian lands not included in the purchase of the preceding July. The legislature acceded to this request, and soon found a purchaser of the pre-emption rights in relinquished lands in the person of Mr. Robert Morris, of Philadelphia. Mr. Morris sold, in 1792-'93, to Herman Leroy and others, for parties residing in Holland (who, being aliens, could not hold real estate in their own names under our laws), four different tracts of lands, described in four separate deeds of conveyance, including the land upon which the city of Buffalo now stands. This was the famous Holland purchase. The Indian title in these tracts not having yet been extinguished, a council was held with the Senecas

at Genesee, in 1797, at which the Indians gave up all rights in the Massachusetts lands, with the exception of ten reservations, containing in all 338 square miles—a liberal provision for the comparatively small remnant of the Six Nations then remaining in New York. One of these reservations, containing 130 square miles, was located at Buffalo creek.

The Holland Company, as it was called, immediately set to work through their American agents to improve the value of their purchase and to encourage immigration. It became very important to them to secure a landing-place and harbor near the foot of lake Erie, where they might establish a commercial village or city, and as the New York reservation excluded them from the waters of the Niagara, and from the shore of lake Erie 1 mile southerly from the river, the mouth of Buffalo creek seemed the most available spot left. Captain William Johnston, who has been mentioned as having settled here at an early period, had procured of the Indians, through a gift to his son, 2 square miles of land at the mouth of Buffalo creek, including the territory on which now stands part of the city of Buffalo. He had also entered into an agreement that amounted to the life-lease of a certain mill-site and the timber-land in its vicinity, about 6 miles from the mouth of the creek. Although Johnston's title to this land was not considered to have the least validity in law, yet the Indians had the power and manifested the inclination to include it within their reservation, unless a compromise was made with Johnston; and, taking into consideration his influence with them, the company concluded to enter into an agreement with him whereby he gave up his right to the land, in consideration of which the company conveyed to him 640 acres, including the mill-site, and 45.5 acres of the 2 square miles, including his buildings and improvements. So the Holland company got a foothold on lake Erie and determined the site of the embryo metropolis of western New York.

The Senecas lingered about Buffalo creek for many years. The site of the city was in early days their hunting-ground, and they shot squirrels within its limits down to the time of its incorporation as a city in 1832. They were familiar to its streets and visitors in its houses until 1843 and 1844, when, their last lands having been sold, they departed from the home of their fathers, some of them joining their brethren who had previously emigrated to the Cattaraugus and Allegany reservations, and the remainder finding a home upon reservations allotted to them in Kansas. Among them were some of great natural gifts, and others who combined solid worth and weight of character with vigorous intellectual powers. Many were confirmed drunkards and as idle as lotus-eaters, but to the last there remained a few chiefs, wise in council, courageous in action, and dignified in demeanor, who in their presence and conversation vindicated the tradition that as statesmen and warriors the Senecas were proudly eminent among the Six Nations.

In 1797 the Holland company employed Joseph Ellicott to survey their lands in western New York. His name is most intimately associated with the early history of Buffalo. He was a younger brother of Andrew A. Ellicott, then surveyor-general of the United States. He had assisted the latter in laying out the city of Washington, which he adopted as a pattern for the present broad streets, diagonal avenues, and public squares of Buffalo. His plan included most of the principal streets lying south of Chippewa street—that being the most northerly highway of the future metropolis of his imagination. To many of these he gave the names of members of the Holland company, but the inhabitants of the new town sniffed contemptuously at the inharmonious names of Willink and Von Staphorst, Busti and Vollenhoven, Stadintski and Shimmelpennink, and summarily ejected them from the premises. The town itself he called New Amsterdam, but the name never enjoyed popular favor or came into general use. The company continued to use it in their conveyances of lots until 1811 or 1812, when it was dropped and the name of Buffalo was substituted.

The surveys were not completed so that sales of village-lots could be made much before 1804, but sales of farm-lots in the vicinity were made in 1803. In a letter to Mr. Busti in May, 1802, Mr. Ellicott deprecated the delay, saying that the state intended offering the mile strip known as the New York reservation for sale, and that there was "a situation on said lands intended to be purchased, equally or more advantageous for a town than New Amsterdam; so that if the state shall make the intended purchase this summer and offer this spot for sale before New Amsterdam gets in operation, the 'nick of time' will be lost to the future prosperity of that place". The advantages possessed by the "situation" alluded to, viz, Black Rock, were ultimately far more than counterbalanced by the building of the long pier in the Niagara river for the use of the Erie canal, the construction of the pier and breakwater at the mouth of Buffalo creek to protect and keep open the harbor, and the extension of the Erie canal to that place. Both are now included within the corporate limits of the city of Buffalo. The disability of the members of the Holland Land Company to hold a legal title in New York was removed in 1789 by an act of the legislature, and the lands were conveyed to them. Thus the present title to the territory of Buffalo embraced in the mile strip is derived from the state of New York, and to the remainder from individuals composing the Holland company.

In the disposal of lots in New Amsterdam (or Buffalo) Mr. Ellicott was very careful to confine the sale to actual settlers, and to require a certain stipulated amount of improvements in a given time. He often refused to sell lots for the whole purchase money in advance unless buildings were first erected upon them or some earnest given for their erection. This accounts for the slow sale of lots. In the absence of such conditions the original village plat, at the low prices asked, would have been sold before 1820. These conditions, it should be observed, were not for

the usual purpose of increasing the value of the premises and keeping the lien for the purchase money good, but were intended to make every purchaser an actual settler. The result was that, a quarter of a century after the original survey, many lots remained unsold.

The first emigrants to western New York went from all parts of the United States, but for the most part from New England. Among them were many of English, Low Dutch, German, Scotch, or Irish origin, but in most places the New England character was the prevalent trait. It was perhaps due to this that the settlers in Buffalo so early made a movement in relation to schools. On the 11th of August, 1801, Joseph R. Palmer, "by request of the inhabitants", wrote to Mr. Ellicott requesting him to "grant them the liberty of raising a school-house on a lot in any part of the town, as the New York Missionary Society has been so good as to furnish them with a school-master clear of any expense, except boarding and finding him a school-house". Mr. Ellicott at once went to Buffalo to lay off a lot, and the house was speedily erected, the expense probably being met by subscription. It was usual both for young men and for young women to attend this school, which was considered to be of a higher order than any taught in the surrounding country. The school-edifice also served as a place of public worship, meetings being held there whenever the services of a minister of any denomination could be obtained. These meetings were generally attended by all the inhabitants without distinction of sect or party.

Rev. Timothy Dwight, who visited Buffalo in 1804, described it as follows:

Buffalo Creek, otherwise New Amsterdam, is built on the northeast border of a considerable mill-stream which bears the same name. A bar at the mouth prevents all vessels larger than boats from ascending its waters. For boats it is navigable about 8 miles. Its appearance is more sprightly than that of some others in this region. The southwestern bank is here a peninsula covered with a handsome grove. * * * The village is built half a mile from the mouth of the creek, and consists of about twenty indifferent houses. * * * The streets are straight and cross each other at right angles, but are only 40 feet wide. What could have induced this wretched limitation, in a mere wilderness, I am unable to conceive. The spot is unhealthy, though of sufficient elevation, and, so far as I have been informed, free from the vicinity of stagnant waters. The diseases prevailing here are those which are common to all this country. The inhabitants are a casual collection of adventurers, and have the usual character of such adventurers thus collected when remote from regular society, retaining but little sense of government or religion. We saw about as many Indians in this village as white people. The superintendent of Indian affairs of the Six Nations resides here. New Amsterdam is at present the thoroughfare for all the commerce and traveling interchangeably going on between the eastern states (including New York and New Jersey) and the countries bordering on the great western lakes.

The creek is frequently said to unite with the river Niagara. I should say, as I believe every other man would who spoke from his own inspection, that it unites with lake Erie, and that the river Niagara begins 2 miles farther north, at, or rather just below, Black rock. [He evidently mistook Bird island for Black rock.] Here the first perceptible current commences, while at the mouth of the creek the waters, unless agitated by the wind, are perfectly still, and have exactly the same appearance as other parts of the lake. At Black rock, a town which is a mile square has been laid out by order of the state into house-lots. * * * Between this rock and the shore is the only secure harbor on the American, and a much better one than on the British, side of the lake within a great distance. A road is already begun from the spot to fort Niagara, at the mouth of the river, and will not probably be completed within a year.

It is interesting to compare with this account some remarks of Timothy Bigelow, of Massachusetts, in a *Journal of a Tour to Niagara Falls* in 1805. He wrote:

[From Ransom's] to Crow's, at Buffalo Creek, 8 miles. * * * Half the distance from Ransom's was over open country, * * * in which many young chestnut trees are just sprouting from the ground. The rest of the way was through a thick wood, where the growth is of the same kind as in the interior of Massachusetts. At Crow's we could procure nothing for refreshment. The settlement is a village containing about thirty shabby houses, very much resembling barracks. It is situated at the southeastern extremity of lake Erie, on a rising ground, which forms the east branch of Buffalo creek. An old Indian told me that the inhabitants of this place derive their principal support from the Indians, who here receive from the agents of the government their annual allowances, no small part of which they soon appropriate. The Buffalo creek * * * is a lazy and muddy stream. Crow informed me that a strong westerly wind forces the water of lake Erie with such violence on its eastern shore, which is a kind of bay not more than 3 or 4 miles wide, as to raise a tide sometimes 10 or 12 feet high.

From Buffalo we passed along the beach of lake Erie to the ferry across its outlet on the Niagara river, at Black Rock, so called, 3 miles. We were here detained for more than an hour, waiting the pleasure of the ferryman. * * * When at length he arrived, we were almost deterred from attempting the passage, on account of the wretched machine on which we were to be transported. It was a crazy flat-bottomed boat, with low sides, constructed at first of thin planks, and which had apparently begun to decay. In this slender vehicle, navigated by a drunken Irishman, who commanded an Indian and a negro wench, who seemed to be much the ablest of the three, were to be consigned ourselves, with our driver, horses, wagon, and loading, across the most formidable ferry perhaps in the world—a stream three-quarters of a mile wide, 20 or 30 feet deep, and running at the rate of 5 miles an hour. Having no alternative, however, we embarked. Fortunately a fresh breeze was blowing up stream, which, by means of a ragged sail fastened to a pole, enabled us not only to resist the current but to make such progress that in nine minutes we reached the opposite shore in safety. * * * So severe was the drought this summer that we saw young forest trees, in the neighborhood of Buffalo creek, where the soil was upon a bed of rock, which had actually perished for want of moisture, and yet the lake and river were at their usual height. Indeed, we were expressly told that this height was never known to vary unless affected by the wind.

The settlement of western New York was greatly facilitated by the construction of roads. The paths by which the first inhabitants came into the country were mere Indian trails. Often they were obliged to stop for hours in their progress, to construct a temporary bridge to enable them to cross a stream. In March, 1794, three commissioners were appointed to lay out a road authorized by law, from Utica by Cayuga ferry and Canandaigua to the Genesee river at Avon. Judge Porter says in his memoir that in 1797 the only road from Avon to Buffalo was an Indian trail, and that there was but one house on it. The whole country, in fact, was at that time a savage wilderness, and its settlement by whites can hardly be said to have begun until the

beginning of this century. In 1800 a road was made from Avon to Garson's settlement, and this constituted one continuous road from Utica to Buffalo, but in that year only 3 miles of it were completed. In 1803, we learn, there were two roads from Buffalo Creek to Batavia, one of which was 5 miles shorter than the other, but was of more recent date; and of its whole length of 18 miles no less than 13 were of mud, while the old road contained but 8 or 9 of mud out of 25. All the roads of those days were execrable. A framed bridge over a stream was a novelty, and a chinked or covered crossway was a luxury that marked a neighborhood which was getting ahead of the country generally in the march of improvement. The road running east from Buffalo, called "the Buffalo road", was by far the best in the region at that time, and it was so bad that as late as 1812 the slow and circuitous course of trade was directed from Buffalo through the Niagara river to Schellonger, thence by portage to Lewiston, thence by water to Oswego, and up the Oswego river, through Oneida lake and Wood creek, and across a short portage to the Mohawk river, thence by that river and around the portage at Little Falls to Schenectady, and thence over the plains to Albany. Charles Townsend and George Coit, who came to Buffalo as traders in 1811, brought over this route about 20 tons of merchandise—a large stock for that time—at a cost of \$50 per ton from Albany. In that year a stage ran twice a week from Albany to Buffalo.

The first minor civil division in which the territory now occupied by the city of Buffalo was included seems to have been Tryon county, which was set off in 1772, being named after the English governor, and embracing the whole western and middle portions of the province. In 1784 the state legislature changed the name to Montgomery, in honor of the illustrious general who fell in the assault upon Quebec. In 1789 the county of Ontario, embracing the whole of what we now term western New York, was set off from Montgomery county. Genesee county was separated from Ontario in March, 1802, and in March, 1808, the western extremity of the state became Niagara county, Buffalo being made the county-seat, upon the condition that the Holland Land Company should erect a court-house and a jail upon a suitable lot, and convey the same to the county. These were built in 1810. The first court in the new county was held in June, 1808, in a tavern. No further change in the county organization was made until 1821, when Niagara was divided into several counties, of which the present county of Erie was one.

The political machinery of civil government received little attention from the early settlers. Up to about 1805-'06 nothing but the ordinary organization of towns existed, and all the territory west of the Genesee river had been included in the town of Northampton. Buffalo Creek, however, lay as yet entirely without the pale of civilization. Towns now began to be organized in western New York, and on the 8th of February, 1810, the town of Buffalo was created by an act of the legislature, being set off from Clarence, and including all that portion of the state which lay west of the west transit line. The transit lines were meridian lines 16 miles apart, by which the Holland purchase was divided into four separate parcels. The town of Buffalo at its first organization must have contained an area of about 300,000 acres. It was the giant parent of a comparatively dwarfed progeny, for it included what are now known as Grand Island, Tonawanda, Amherst, Checklowaga, the northern part of West Seneca, and the city of Buffalo.

From 1809 to the beginning of the war of 1812 quite a number of settlers came into Buffalo and a good many buildings were erected. In 1811 Judge Townsend estimated the number of dwellings at nearly 100 and the whole population at about 500. There were then three taverns and four stores in the place. At that time the population of the Holland purchase, in the estimation of Mr. Ellicott, was a little over 23,000; in 1812 it was probably not far from 25,000. The only portion of the entire purchase where there was any thing like a compact settlement was in the few small villages and upon the Buffalo road. John Melish, an English traveler, who was in this country in 1811, says, in an account of his journey from Buffalo to Batavia, that "the houses were so thick along the road" that he "was seldom out of sight of one". This was far more than could have been said of any other road upon the purchase at this period.

During 1811 fears of a war with Great Britain began to be entertained, and the people of Buffalo soon realized that their position was a dangerous one in case war should be declared. Their anxiety was increased by the fear that the Indians in the vicinity might side with the enemy in case of war; and, notwithstanding the fact that the Indians declared they would remain in peace, so great was the mistrust of them that when hostilities actually began many citizens left Buffalo, and it is probable that not 1,000 remained at the beginning of the war.

The British officer at Niagara received the news of the declaration of war from the British minister at Washington in advance of any official information communicated to the American officers, and measures were immediately taken by the British to capture every thing belonging to the United States within their reach. The first act of open hostility was the capture of a small vessel laden with salt, which lay off the mouth of Buffalo creek waiting for a wind, by two large boats filled with armed men from the British fort Erie. In September, 1812, Lieutenant Jesse D. Ellicott, of the United States navy, was sent to superintend the construction of a fleet on lake Erie. Black Rock was chosen as the place for a dock-yard. While busily engaged there, early in October, Ellicott learned that two British vessels—the brig "Adams", of 6 guns, and the schooner "Catalonia", of 2 guns—had come down the lake and anchored under the guns of fort Erie, and he immediately conceived a plan for their capture. On that very day a detachment of seamen for service under him arrived from New York. Just from a long, dull overland journey, they entered enthusiastically into the affair, as did also some of the citizens of Buffalo, led by the brave Dr. Chapin. At 1 o'clock the next morning three armed boats, with 102 men, started out from

Buffalo creek for the attack. The surprise and success were complete. The vessels were captured and taken down the river; one was burned, but the other was saved and subsequently unloaded. Had this expedition failed, it would have been pronounced the height of presumption and rashness; but, as it proved successful, it was characterized as a "gallant and daring exploit".

During the rest of this year and the early part of 1813, Buffalo played an insignificant part in the drama of war of which our northern frontier was the scene, but in the summer of 1813 she came to the front again. The success of the British at Beaver Dams, in June, made them bold, and they were gradually closing upon the Americans at fort George and Newark. Frequent picket-skirmishing followed, and bold raids into the American territory were performed. One of these took place on the morning of the 11th of July, 1813. A party of between 300 and 400 British soldiers landed just below Black Rock shortly before dawn, proceeded to Black Rock, dispersed the few American militiamen stationed there, and then sacked the place. General Porter, who narrowly escaped from his house at Black Rock, hurried to Buffalo and hastily gathered together a force consisting of about 100 regulars, 50 dragoon recruits, 50 volunteer citizens, and 40 Indians. With these he attacked the invaders most vigorously. After a short, spirited contest the foe were beaten, and driven in confusion to their boats, suffering considerably in the retreat, while the American loss was only some 15 or 20 killed and wounded.

Another British raid, later in the year, ended far more disastrously for Buffalo. In December it was known that preparations were making to invade our territory, but as fort Erie was the seat of these, the point at which the attack would be made was very uncertain. So when, on the night of December 29, a report was given that the British had landed down the river below Squaw island, it was suspected to be only a feint to draw off the force from Buffalo, where it was expected the principal attack would be made, and, accordingly, only a small company of volunteers went to meet them. An unexpected volley from fifty British muskets in the darkness of the night was too much for the raw recruits, and they fled precipitately. All was uncertainty until the daylight revealed a large force embarking in boats higher up the river. The whole American force was at once directed against this new invading party. At this, the detachment that had landed in the morning down the river began to move up, and it was not observed until it began an attack upon the Americans in the rear. This attack, from an unexpected quarter, caused them—mostly volunteers and militiamen—to give way, and it became impossible to rally them. Deserted by a large portion of these troops, opposed by veterans, vastly outnumbered, and almost surrounded, General Hall, the American commander, was compelled, for the safety of the remnant of his little army, to sound a retreat after he had maintained the unequal conflict for half an hour. The gallant Chapin, with a few of the bolder men, retired slowly along the present Niagara street toward Buffalo, keeping the enemy partially in check, while Hall retired to Eleven-Mile creek, where he succeeded in rallying about 300 men, who stuck by the flag. With these he was enabled to cover the flight of the inhabitants, and to check the advance of the invaders into the interior.

The adult male population of the village had gone down to Black Rock early in the morning, leaving the women and children under a strong belief that the enemy would be repulsed, as he had been upon a former occasion; and when the alarm was given that the British and Indians were advancing in full force to Buffalo, a universal panic followed. Horsemen took up females behind them, and, in some instances, children before them, and thus aided them in their escape. Families were in this way separated, and in some cases did not reunite for weeks. So sudden was their surprise, and so destitute of the means of escape were those who were left in the village, that very few saved any thing except what they had upon their persons. This was the case in many instances; for although a few families had taken the precaution to remove a day or two before the attack, still the great mass of them remained. The British and their Indian allies took possession of the village, and proceeded to plunder, destroy, and slaughter. Only four buildings were left standing in the place—the jail (built of stone), the frame of a barn, Reese's blacksmith-shop, and the dwelling of Mrs. St. John, a resolute woman, who, more fortunate than her neighbor Mrs. Lovejoy (who was murdered and burned in her own house), saved her own life and her property. Fearful was the retaliation for the destruction of half-inhabited Newark. Six villages, many isolated country houses, and four vessels were consumed by the flames, and the butchery of innocent persons attested the fierceness of the enemy's revenge. In a letter written from Leroy on the 6th of January 1814, we read:

Many dead bodies are yet lying unburied at Buffalo mangled and scalped. Colonel Marvin counted 33 this morning. I met between Cayuga and this place upward of 100 families in wagons, sleds, and sleighs, many of them with nothing but what they had on their backs, nor could they find places to stay at.

A few families returned within a short time, but general rebuilding did not begin until the following year. Meanwhile, from the 10th of April, 1814, when General Scott assumed command here, until the 17th of September, when the victory of fort Erie brought peace to the Niagara frontier, it was the base of active military operations.

With the close of the war in December of that year Buffalo began to revive, but it was some time before it fully recovered from the set-back it had received. It is to be remarked that the new Buffalo was not the work of a new community, for it was composed for the most part of its former inhabitants. The influence of the war on the growth of the place is shown by the transfers of lots made in the different years by the Holland Land Company. According to the list given by Ketchum, in Appendix 6 to Vol. II of his *History of Buffalo*, there were, previous to 1812, 47 sales of inner and 32 of outer lots or parts of lots; in 1813 and 1814, 16 of each; from 1815 to 1824,

inclusive, 46 of inner, 12 of water, and 30 of outer lots or parts of lots; and in 1825, 39 of inner and 12 of outer lots or parts of lots. From 1826 to 1830, inclusive, 54 inner, 3 water, and 33 outer lots or parts of lots were disposed of, leaving a few, which were gradually taken up in subsequent years.

Little can be said in praise of the social condition of Buffalo in these early years of its existence. In consequence of the intermixture of immigrants from different parts of the country, there was great diversity of habits, tastes, and modes of thinking on many subjects. The habits of the people were loose and irreligious. The sabbath was made a day of business, visiting, or pleasure. Drinking and carousing were by no means rare. Almost all the Indians, here as elsewhere, were depraved and ruined by their taste for "fire-water", and the memoirs of the chief white men show that very many of them were affected by the same cause. Reducing the discordant elements of such a half-civilized community into something like social order was a task which required no ordinary degree of moral courage on the part of those who were the constituted leaders of the work. Even as late as 1818 affairs were in such a state that these men felt it their duty to form a "moral society" for the suppression of vice and immorality. Among other measures, this body passed a resolution—

* * * that after the 23d November instant, the laws of the state prohibiting the violations of the sabbath shall be strictly enforced against all persons who on that day shall drive into the village loaded teams, or who shall unload goods, or keep open stores or shops for the purpose of trading or laboring, or who shall engage in hunting, fishing, etc. Also against all parties of pleasure, riding or walking to Black Rock, or elsewhere.

Naturally one of the most cogent instruments in bringing up the moral tone of the inhabitants was the church. The early settlers held religious services when any one could be found to conduct them, but no church was organized until February, 1812, when Rev. Thaddeus Osgood, an itinerant minister, organized the body now known as the First Presbyterian Church of Buffalo, with 8 male and 21 female members. The war and the burning of the village almost extinguished it, but in 1815 it was resuscitated, and grew as the place grew. In 1823 a brick edifice was built. A Methodist church had been founded in 1809, but it had no permanent organization until 1818. In that year 8 persons, who "called themselves Methodists, mostly transient and poor", were formed into a society. In the early part of the year they erected a small building, 25 by 35 feet, in 48 days, which was the first church edifice in Buffalo. In 1842 the houses of worship existing in the city were: 3 Presbyterian, 2 Episcopal, 1 Baptist, 1 Methodist, 3 German Protestant, 2 African, 1 Unitarian, 1 Universalist, 2 Roman Catholic, and 1 Bethel.

The village of Buffalo was incorporated in April, 1813, but the bustle and incidents of the war prevented all action under the charter then given. A bill giving a new charter was enacted April 5, 1816, and the village accepted it, and was organized under it on the 6th of May following. The trustees appointed by the act continued to hold office until the first election, which took place on the first Monday of May, 1817. The powers of the board of trustees, however, were extremely limited until they were augmented by a new charter in the year 1822. Ordinances were made, and taxes imposed by the freeholders and inhabitants, in meetings convoked by the trustees, who appear to have been mainly executive officers. The first tax ever imposed in Buffalo—one of \$1,400, to be apportioned according to the assessment-roll for that year—was passed in November, 1816; at the same time the inhabitants directed their attention to the security of the village from fire, passed some wholesome precautionary ordinances, provided for the purchase of hooks and ladders, and required the trustees to ascertain the practicability of procuring a supply of water, by means of water-courses, aqueducts, reservoirs, or otherwise, and, if in their opinion the object could be thus obtained, to purchase any real property or privileges that might be necessary. Nothing, however, seems to have been effected under this resolution, except that in the following March a fire company was organized. In 1817 a school was maintained for most of the time, being kept in such rooms as could from time to time be obtained. In that year the first organization under the common-school law of the state took place, the whole village being embraced under one district. A tax of \$554 25 was levied to build a school-house. This was built, but as no conveyance of a lot was obtained the building had to be removed several times. As population increased the district was divided and subdivided, and new schools were opened. In 1832 there were 16 public and private schools in the city, but the scholars all told would not equal in number those attending one or two of the great schools of the present day.

On the 26th of July, 1820, the freeholders and inhabitants adopted a code of by-laws, and an extremely short one it was, consisting of only nine enactments, intended to prevent the keeping of damaged meats, fish, etc.; to compel their owners to remove dead animals; to prevent the firing of crackers, etc., and the lighting of bonfires, always excepting the burning of shavings, in the streets; to prevent nuisances in and obstruction of streets, lanes, alleys, and sidewalks; to enforce cleanliness in market- and slaughter-houses, and make them subject to the inspection of the trustees; and to prevent driving on sidewalks and driving faster than a trot in the streets. These and all the other by-laws enacted before the city was incorporated would hardly fill two columns of an ordinary newspaper. In May, 1821, \$200 was appropriated to build a public market, and it was provided that the rent to accrue from it should "be expended exclusively on making wells and reservoirs". But two days afterward this act was rescinded, and the trustees were authorized to contract with any individual to build a market "without taxing the village". In April, 1822, an ordinance was passed to prevent the sale of meats anywhere "except at the new public market", under a penalty of \$2. In May, 1823, the market-house was appraised at \$306 75, but it does not appear that it

ever became village property. In May, 1823, the first attempt was made, by ordinance, to prevent domestic animals from running at large. In June, 1826, the names of the streets were changed and their Dutch appellations discarded by a resolution of the trustees. In this, being the first year in which any licenses were issued by the village authorities, 14 tavern and 64 grocery licenses were granted. The general tax, including 5 per cent. for the collector, was \$1,270 50. In 1830 the tax was only \$5,000.

The fire department was augmented in December, 1824, by the formation of a second fire company. Nothing further of note seems to have been done in this respect until 1831, when a tax of \$3,000 was imposed for the exclusive purpose of constructing wells and reservoirs and the purchase of fire-engines, etc. In November \$2,000 was paid for a fire-engine and 200 feet of hose, and the third fire company was organized. Two engine-houses had been built and another engine ordered.

The sidewalks of the village were undefined and unregulated until 1825, and the streets were mere roads until 1835. In June, 1826, the village was divided into five ward districts, "for the better improvement of the streets and highways therein". No order for paving sidewalks was made until July, 1829, when Main street was ordered to be flagged and railed at the expense of the owners. In 1831 a general road superintendent was first appointed. From these and previously-stated facts it is apparent that Buffalo had now attained to considerable proportions. In the first few years after the war of 1812 its growth had been slow, but in 1825 it took a start, and from that time to the present its increase in population and wealth has been wonderful. Although the cause of its start in 1825—the completion of the Erie canal—was only an isolated event, yet that with which the Erie canal is synonymous, viz, commerce and navigation, has made this event the keystone of Buffalo's prosperity. The history of this prosperity is to a great extent identical with the history of the navigation and commerce of the great lakes.

The keel of the first vessel on lake Erie was laid on the 26th of January, 1679, by Sieur de La Salle, the renowned explorer. This vessel was built at the mouth of the Chippewa river, a short distance above Niagara falls, for the use of the Jesuit father, Hennepin. It made one trip to the upper lakes, and, on its return voyage, disappeared. Whether its was because this voyage ended so inauspiciously or for some other reason, its successors were very few. After the revolutionary war, as long as the military posts on the northwestern frontier were in the hands of the English, American boats were not allowed to navigate the lakes, and as no settlements of importance existed on them (excepting the old French settlements in the neighborhood of these posts, and they were under the influence and jurisdiction of the British government), few vessels were required, and of course few were built. From 1796 on, however, numerous vessels were launched on the lakes.

Although the Holland company founded Buffalo, or rather New Amsterdam, for the purpose of having a post on lake Erie, its chances for becoming the commercial metropolis that they anticipated looked for a long time very dubious, for its harbor, if it could be called such, was very poor. While the mouth of Buffalo creek was always obstructed by a formidable bar, and sometimes utterly closed by it, Black Rock, just below, presented an excellent harbor, which easily monopolized the infant commerce of the lakes. In 1805 Congress established the collection district of Buffalo Creek, and provided that the collector should reside at Buffalo; but business experienced such inconvenience thereby that, in 1811, Black Rock was made the port of entry for the district during nine months of the year, and Buffalo during the other three months. Up to the war of 1812 nothing had been done to open the mouth of the creek, which, even as late as that time, was in the dry season a mere rivulet.

In 1818, on the application of the citizens of Buffalo, the state legislature authorized the survey of the mouth of Buffalo creek, with a view to the construction of a harbor, and in the next year authorized a loan of \$12,000 for carrying out the work. A pier was built upon the outer side of the channel of the creek, extending into the lake about 80 rods, reaching 12 feet of water; and in 1821 a channel was formed of sufficient depth to admit vessels of ordinary size into the creek, giving assurance of the success of what had been considered a doubtful experiment. On the 19th of August, 1822, was passed the first ordinance "to prevent obstructions of the navigable waters of Buffalo creek within the limits of the village", merely providing against leaving vessels, boats, or hulls unmoored or unfastened.

The construction of a channel and harbor by the citizens of Buffalo won for that place the honor of being the western terminus of the Erie canal. The argument which decided the fate of the rival communities of Buffalo and Black Rock was held before the canal commissioners at the Eagle tavern in Buffalo, in the summer of 1822. Both sides were represented by able counsel, and the cause was the most important ever argued in Erie county. De Witt Clinton presided and summed up the arguments. Buffalo won the day, and Black Rock sank into an obscurity from which it finally disappeared when it was incorporated within the limits of Buffalo. The Erie canal was opened for navigation on the 26th day of October, 1825. A procession was formed in which rode De Witt Clinton, who, with a committee from New York, had arrived the previous evening. They were escorted to the canal, where they embarked upon the canal-boat "Seneca Chief", which then proceeded upon the first eastern trip ever made through the Erie canal. The remainder of the day was devoted to banquets, speeches and odes, hymns of praise, and solemn prayer. The future greatness of Buffalo was secured. The tide of its prosperity began to rise at once. Its population of 2,412 in 1825, rose to 8,686 in 1830. Its subsequent development into a city was the natural fruit of the labors of the men who made for it a harbor and fixed it as the terminus of the Erie canal.

The state legislature passed an act to incorporate the city of Buffalo, April 20, 1832. On the 26th of May an election was held, and on the 28th the first city government was organized. E. C. Sprague, in speaking of the condition of the place at that time, says:

It was a little city erected upon the substance of things hoped for rather than things seen. It contained a few scattered brick buildings, and perhaps twenty handsome dwellings, mostly of wood; but the bulk of the city consisted of frame houses, generally from one to two stories high, even on Main street. * * * The streets were unpaved, and the darkness of Main street was made visible by a few oil lamps.

* * * The daily street costume of some of our leading citizens in 1832 was a black or blue dress coat, with costly gilt buttons, a voluminous white cravat, a ruffled shirt, accompanied by the "nice conduct" of a gold-headed cane. Main street presented a picturesque variety, including elegantly-dressed gentlemen and ladies, blanketed and moccasined Indians, and emigrants in the strange costume of foreign lands. Most of the business was done upon the west side of Main street, between Mohawk and Exchange. * * * It appears by the directory of 1832 that the city contained 6 churches, 8 "institutions", including some debating societies, 2 banks, and an insurance company, and a library of "nearly 700 volumes". * * * Sixty mails a week during winter and 88 during the season of navigation were "received, made up, and dispatched at the post-office". Of the amount of property shipped from this port it is stated that no certain information could be obtained, but we are informed that there were "10 storehouses", for the transaction of lake and canal business. Even then, however, the steamboats on the lakes, though few in number, were among the best in the country, and were crowded with passengers, who had arrived from Albany on the canal and were seeking a home in Ohio and Michigan. There were some 40 manufacturing establishments in the city, perhaps altogether not equaling in capital and men employed one of the great establishments of the present day.

Mr. Sprague says that "the city was visited in 1832, and in other years, by cholera and by fire", but gives no details. As to his statement that "during the speculations of 1835 it rose 'like a rocket', and in 1837, 'dropped like a stick'", abundant information is furnished by Guy H. Salisbury in a paper on "Buffalo in 1836 and 1862". He says:

The year 1836 will long be remembered as one of crisis, not only in our own locality, but throughout the nation. It opened with universal prosperity apparently covering the land; it closed with almost universal bankruptcy spread widely around. The cause of the change was speculation, in Buffalo as elsewhere, chiefly in land. One citizen of Buffalo, of great respectability and unblemished integrity, then advised the purchase of land at \$125 per foot, that in three years afterward could not have been sold for \$25 per foot. Another valued improved lots at \$60 per foot that were subsequently sold, after 12 years' interest, taxes, and assessments had been paid, for \$7. As far as the records show, there were some 12,000 deeds, mostly for city property, recorded during the period spoken of—being about 3,000 more than had been made in the entire county since its organization a quarter of a century previous. Assuming that there were as many transfers by contract as by deed—a low estimate—the aggregate number of conveyances must have reached nearly 25,000, and the entire amount of purchases could have been little less than \$25,000,000. The buildings erected here during 1835 and 1836 were estimated at that time to have cost \$2,330,000. Some of them were palace-like mansions, costing from \$20,000 to \$30,000 exclusive of their extensive and valuable grounds. But the crash was sure to come, and when it did come the collapse was complete. It was many years before Buffalo fully recovered from its effects. The unnatural stimulation of business and the subsequent depression made an important epoch in Buffalo's history.

In 1836 the city had less than 16,000 inhabitants. It had but a single street paved, and that for only one-fifth of a mile in length. It had but one mile of sewers, imperfectly constructed, scattered through three streets. There was but a single railroad running into the city—that from Niagara falls—of less than 20 miles in length, with no connection with any other road. There were but four omnibuses, making hourly trips through a part of Main street, and literally a "one-horse railroad", that made occasional trips between the Terrace market and Black Rock ferry. The entire receipts of flour during the year were 139,178 barrels; of wheat, 304,090 bushels; of corn, 204,355 bushels; of oats, 28,640 bushels. The canal tolls collected here in 1835 amounted to only \$106,213. The shipping belonging to the port in 1836 aggregated but 8,541 tons.

The first elevator in the world was built in Buffalo. Here, in 1841, Joseph Dart determined, as he says, "to try the use of steam-power in the transfer of grain for commercial purposes." The "experiment from the very first working was a decided and acknowledged success". Dart says that the elevator, "a simple apparatus, consisting merely of a series of buckets attached to a leather or canvas and rubber belt revolving upon pulleys", was invented by Oliver Evans, a Delaware miller, in the latter part of the last century. This simple apparatus in time came to be used in all flouring-mills. Its application to the transfer of grain in its movement toward a market was an idea of Dart's—an idea from which has sprung the mighty elevator of the present day.

In 1841 it became evident to Dart that there was to be a very speedy and immense increase in the future grain business of this port, and that this increasing trade demanded largely-increased facilities for its accommodation. Already, with nearly 2,000,000 bushels received in 1841, unfavorable delays in the transshipment at this port were frequent, and were the occasion of much vexation and expense. Up to this time the universal method of transfer was to raise the grain from the hold of the vessel in barrels, by tackle and block, to weigh it with hopper and scales swung over the hatchway of the canal-boat, or carry it into the warehouse in bags or baskets on men's shoulders. The most that could be accomplished in a day, with a full set of hands, was to transfer some 1,800 or 2,000 bushels, and this only when the weather was fair. Dart's first elevator, erected in the autumn of 1842, raised without difficulty 1,000 bushels an hour at the start, and later, by putting the buckets nearer together, it raised 1,800 or 2,000 bushels per hour. Its storage capacity was 55,000 bushels. In 1865 there were 27 elevators, besides 2 floating elevators, storing, some of them, 600,000 bushels each, and altogether fully 6,000,000 bushels, and capable of moving in a single day more than the entire receipts at this port at the time Dart's first elevator was built.

The subject of sewers seems to have attracted attention first in 1834-'35. Sewers were then constructed in Ellicott and Oak streets, but of a very inferior character. They were but 5 or 6 feet deep, constructed of dry brick,



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with a board bottom, the bricks laid up progressing inward until they met at the top, and held in place as soon as laid by the soil thrown upon them. Even these wretched sewers did good service for many years, but they have been replaced by sewers of modern construction. In 1847 a committee of the board of aldermen was created, called the "committee on paving, sewers, and lights". The committee had its hands full. The call for paving was pressing, and paving was begun at once on a very large scale. Public lamps, of which there had been none, were erected on Main street—oil lamps—so insufficient as to be a constant subject of ridicule for the local editors; and the first great receiving-sewer in Michigan street, from the canal to Batavia street, was constructed. Its cost was at that time considered enormous, the tax proposed being \$12,500—a sum then unprecedented in such improvements. Several minor sewers were constructed during the season of 1847, and on February 15, 1848, the committee submitted a report recommending a general system of sewerage. The report contemplated so large an expenditure as somewhat to alarm the property-holders, and was not adopted. Within a few years, however, its recommendations were in the main carried out, and the city was provided with what was then a satisfactory sewerage system.

In 1847, and for several years following, Buffalo was essentially a maritime town. Its harbor was serviceable but narrow and inconvenient, and the frequent arrivals and departures crowded the water-way so as to give an air of wonderful life and activity to the region of the wharves. Passenger-steamboats were in their glory; elevators were not yet universally adopted, and vast numbers of longshoremen were supported by handling freight by inconvenient processes; canal-boats were small and numerous. Gradually the bustle ceased; elevators drove away the longshoremen; the harbor itself grew apace; new canals were opened, basins constructed, and a larger commerce diffused itself over a larger surface, and made a smaller exhibit than before. Railroads and propellers ruined the business of the "floating palaces", and they were left to rot at their wharves. Buffalo flourished year by year from 1847 to 1857, affected by no serious drawbacks, dependent mostly on its commerce, and the manufactures which commerce stimulated into existence, and with a gradual yet certain transfer of the passenger traffic from the water to the land-routes. The panic of 1857 destroyed the illusive prosperity. Real estate sank rapidly to a rational value; elevators sent the wholesale trade in merchandise to the seaboard cities. Gradually recovering from the effects of the panic, the city resumed its wonted prosperity, but learned a lesson from the past. It needed a permanent business, separated from the lake commerce and independent of its fluctuations, to hold it steady in future crises. It found the object of its search in manufactures, and in a short time Buffalo changed from a maritime to an essentially manufacturing city, and so it has remained up to the present time.

The population of Buffalo, in which there was originally a large New England element, now contains a very large proportion of Germans. The first German to put foot on the soil of Buffalo came in 1821. In 1828 about 70 had already settled here, and in that year a number of other families came. Mr. Sprague says that—

These emigrants were the forerunners and forefathers of that great German population which has contributed so largely to the prosperity, and exercised such a powerful influence upon the character, of our community. What that influence is likely to be in the future may to some extent be judged by a single fact. It appears from the report of the board of health for 1879, that in 1878, of the children born in this city, 1,975 were of German descent; of all other descents, 2,056—a difference of only 81.

BUFFALO IN 1880.

The following statistical accounts, collected by the Census Office, indicate the present condition of Buffalo:

LOCATION.

Buffalo, a city, port of entry, and the seat of justice of Erie county, lies at the eastern extremity of lake Erie and at the head of the Niagara river, in latitude 42° 50' north, longitude 78° 52' west from Greenwich, and is 300 miles west of Albany by the Erie canal. The city is delightfully situated, having a water-front of almost 5 miles, with numerous substantial and extensive piers, breakwaters, basins, and canals. The city extends down the Niagara river 5 miles, and at right angles with it almost the same distance, but the northern and eastern portions are not very thickly settled. The harbor is formed by the Buffalo river, a small stream, which is navigable for about 2 miles from its mouth. The entrance is protected by a breakwater, 1,500 feet long, on the south side of the river, and there is also another on the north side, by which a capacious harbor is formed. The site on the lake-front gradually rises, and at a distance of about 2 miles becomes an extended undulating plain, with an average elevation of 50 feet above the surface of lake Erie. A portion of the water-front is a bold bluff rising 60 feet above the water, and affording a fine view of the city, Niagara river, the Canada shore, lake, bay, and the hilly country to the northeast.

RAILROAD COMMUNICATIONS.

Buffalo is touched by the following lines of railroad:

The Buffalo and Southwestern railroad, to Jamestown, on lake Chautauqua, is operated by the New York, Lake Erie, and Western railroad.

The Buffalo, New York, and Philadelphia railroad, to Emporium, Pennsylvania, connecting there with the Pennsylvania railroad, Philadelphia and Erie division.

The Canada Southern railroad, to Toledo, Ohio.

The New York, Lake Erie, and Western railroad (the old Erie railway), to New York.

The Grand Trunk railway; a branch to Stratford, Canada, gives connection with the whole system of this line.

The Grand Western Railway of Canada, from Buffalo to Detroit.

The Lake Shore and Michigan Southern railroad, from Buffalo to Cleveland, Toledo, and Chicago, with branches to Detroit, Jackson, and Grand Rapids.

The New York Central and Hudson River railroad, from Buffalo to New York, via Rochester, Syracuse, and Albany.

CLIMATE.

Highest recorded summer temperature, 98°, in July, 1868; lowest recorded winter temperature, -15°, in February, 1861. From observations taken from January, 1831, to December, 1870, the mean summer temperature is given as 67.29°, and the mean winter temperature as 26.77°, the mean annual temperature being 46.59°. From the tables of the Smithsonian Institution the mean annual amount of precipitation in rain and melted snow is 35.49 inches.

STREETS.

The total length of streets in the city is 330.8 miles, of which 89.9 miles are paved with stone blocks, 1 mile with asphalt, 1.7 mile with broken stone and gravel, and 4.2 miles with wood, the remainder being of gravel or earth. The cost of each per square yard, as nearly as it may be estimated, is as follows: Stone blocks, first quality, of Medina sandstone, \$1 80; second quality, \$1 30; asphalt, \$2 16; wood pavement, \$2, and gravel and broken stone, laid 20 feet wide, 8 inches of the latter and 6 inches of the former, \$1 25 per linear foot. The use of the wood pavement is being discontinued, and the cost, given above, is for that first laid. The average cost of repairing the stone blocks, after a use of ten years, is about 50 cents per square yard. The asphalt is represented as the most easily kept clean, with the stone blocks next, while the first quality of the Medina sandstone is said to be the cheapest and best for permanent economy.

The sidewalks are of wood and stone—stone in the central and business portions of the city, with plank walks, from 3 to 6 feet wide, in the outlying districts. On the paved streets gutters are of Medina sandstone, 16 inches wide, from 4 to 5 inches thick, laid flat about 8 inches below the top of the curbstone.

Tree-planting, so far as the public parks, park-roads, and approaches are concerned, is under the direct control of the park commissioner. On the ordinary streets the property-owner plants trees under the direction (or subject to objections) of the street commissioner. On the 100-foot streets the sidewalks are 20 or 30 feet wide, and trees are generally planted in two rows—one near the curbstone and one 10 or 15 feet back therefrom. On the 66-foot streets the sidewalks are 12 feet wide, and one row of trees is planted near the curb.

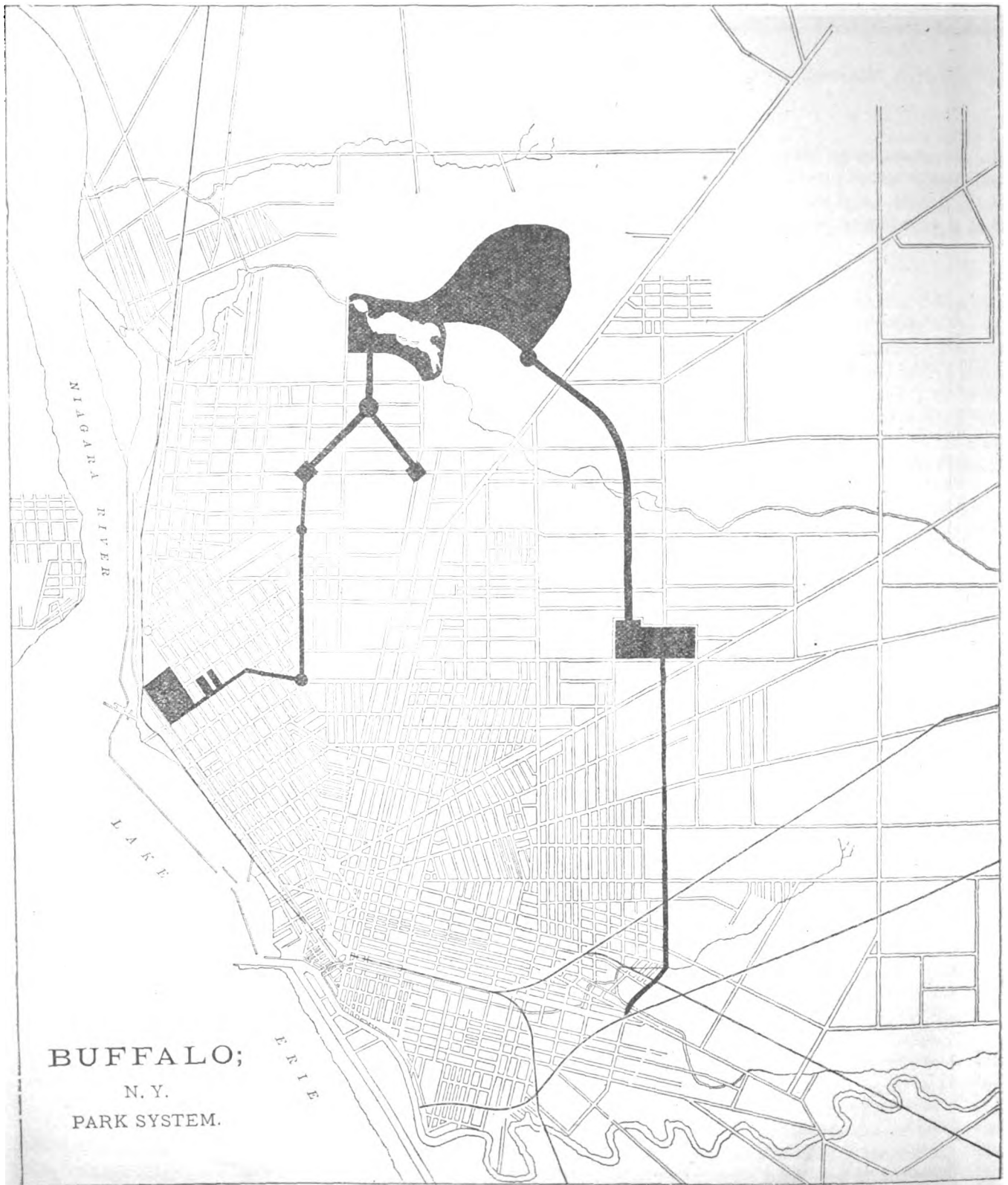
The work of construction and repairs of streets is done by contract, the cost during 1880 being \$46,438. The charter provides that for all work of this kind, amounting to over \$200 for one job, the street commissioner shall advertise for bids on specifications to be seen at his office. Smaller jobs are done under resolutions of the council, and each one has an amount specified in the resolutions, beyond which the expenditure can not go. A steam-roller is used on all parks and macadamized roads and streets. A steam stone-crusher is used by the park commissioner to prepare stone for the park-roads and their approaches. There are 34 miles of street-railroads in the city, with 87 cars and 360 horses, and giving employment to 209 men. The number of passengers carried annually is 4,341,902, and the rates of fare are from 5 to 6 cents, for "short" or "long" cars. The omnibus lines have 14 omnibuses and 30 horses. The number of passengers carried annually is not stated. The rates of fare are 5 and 10 cents.

WATER-WORKS.

The water-works are owned by the city, and their total cost to December 31, 1880, is as follows:

First purchase in May, 1868	\$705,000
Extensions and improvements to date	2,345,000
Total	3,050,000
Bonds retired	100,000
Outstanding obligations	2,950,000

Water is taken from the Niagara river, the high service being supplied by the Holly system and the low service by Worthington pumps. Pumping into the mains is resorted to where the reservoir head is insufficient. The daily average supply for 1880 was 16,634,200 gallons, or over 100 gallons per day for each head of the population. The average cost of raising 1,000,000 gallons 1 foot high is 5.72 cents. The yearly cost of maintenance and operating expenses is \$60,983 67, and the yearly income for water-rates, \$216,214 37. There are 102 miles of distributing-mains, 1,118 fire and 30 public hydrants, and 9,137 reservoirs. Water-meters are used only to a limited extent, there being only 57 set.



BUFFALO;
N. Y.
PARK SYSTEM.

GAS.

There are 3 gas-works in Buffalo, all owned by private corporations. Their average daily production is as follows: Buffalo Gas Works, 240,000; Buffalo Mutual, 160,000; and Citizens' Gas Light Company, 150,736 cubic feet—making a total of 550,736 cubic feet. The charge per 1,000 feet is: To private consumers, \$2 50, less 10 per cent.; and to the city, \$2 net for lamps, and \$2 25 net for public buildings. There are 5,030 street-lamps, and each one costs the city annually about \$26, including lighting, care, etc.

PUBLIC BUILDINGS.

The city owns and occupies for municipal purposes, wholly or in part: The city hall, police headquarters and 8 police stations, municipal court-rooms, fire-department headquarters and 21 station-houses, and 8 markets. The total valuation of all the city property, including land, but not including the city hall, is \$5,241,945. The city and county hall is owned in common with the county, and its total cost was \$1,328,675 78. The city paid half of this and the county half; but as the city is part of the county it paid as such also, so that the city's portion was nearly five-sixths of the total cost, or \$1,107,244 65.

PUBLIC PARKS AND PLEASURE-GROUNDS.

Total area of all parks and approaches, 600 acres, as follows:

The *Park*, area 350 acres, is situated 4 miles north of the city hall, and has a quiet pastoral landscape, with little architectural or horticultural decoration. Its most notable features are a grand sweep of undulating turf 150 acres in extent, and containing many large, well-grown trees, 46 acres of water in an irregular basin about 25 feet below the general level of adjoining slopes, and 3 groves of natural wood.

The *Parade*, area 56 acres, is situated 2½ miles east of the city hall, and consists of a plain with a gentle and uniform slope. There are 20 acres of smooth turf well adapted for military drills or popular sports, a large refreshment-house, and ample accommodations for social festivities.

The *Front*, area 32 acres, is situated 1½ mile northwest of the city hall on the crest of a steep bluff, 50 or 60 feet above the level of lake Erie, at the mouth of the Niagara river. Its special feature is the extensive view afforded by the elevation of the site. This park adjoins the military reservation of fort Porter, and, as the latter is always open to the public, the area of the park is practically increased to 50 acres.

In addition to the above there are 8 small circles and squares in various parts of the city, with a total area of 42 acres. The park-approaches consist of: One avenue, 100 feet wide and 2 miles long, from the Parade south; 1 parkway, 200 feet wide and 2 miles long, from the Parade to the Park; 1 parkway, 1½ mile long, 200 feet wide; and 1 avenue, 2 miles long, 100 feet wide, connecting the Park with the Front. The accompanying diagram of the city shows the location of the several parks and their approaches.

The following table shows the statistics of cost and the estimated number of annual visitors to the park:

	Total.	Park.	Parade.	Front.	Places.	Approaches.
Cost of land and construction	\$1,250,000	\$610,000	\$160,000	\$105,000	\$50,000	\$325,000
Cost of annual maintenance	20,000	10,500	2,000	1,500	2,000	4,000
Estimated number of visitors annually:						
On foot	125,000	40,000	40,000	45,000	Not recorded.	
In carriages	700,000	250,000	175,000	275,000	Do.	
On horseback	7,000	4,000	1,000	2,000	Do.	

The system of parks and approaches was designed by Messrs. Frederick Law Olmstead and Calvert Vaux. All the lands acquired here have been worked over, and about 75,000 trees and shrubs, embracing 400 different varieties, have been set out in plantations. All the grounds have been provided with ample surface- and sub-drainage, while the sewerage and water-supply systems of the city have been extended in every direction.

The parks are controlled by a board of 16 commissioners, inclusive of the mayor, who is *ex officio* a member. One-third of the board is appointed biennially by the mayor and confirmed by the common council. The term of office is six years, and the members receive no salary.

PLACES OF AMUSEMENT.

Though Buffalo is well provided with theaters, halls, etc., no detailed information regarding them was furnished.

DRAINAGE.

The principal part of the city of Buffalo is bounded along its west bank by the Erie canal and its basins, which shut off its shore from the open waters of lake Erie. The water used to supply the locks of the canal below, and

largely to supply mills situated opposite the lower part of the city, is drawn in through the open slips, and passes slowly through the canal, affording a perceptible current, but with no sufficient velocity for the removal of organic matter before its decomposition. At the south end of the main part of the city, a branch of the Erie canal, called the "Main and Hamburg Street canal", 1 mile long and 100 feet wide, penetrates the city in an easterly direction.

This canal, the harbor, and the Erie canal proper bound this principal portion of the city and receive all its waste water, whether surface wash or sewer flow.

East of the city a broad, incompletely-settled area reaches some miles out to extensive stock-yards. North of the ridge, substantially on the line of High street, is a largely built-up district, of which the drainage-flow is naturally toward the north, and thence by natural depression westerly to the canal.

This district includes the Park and the extensive buildings and grounds of the state lunatic asylum.

The drainage of the central portion of the city is of that natural-growth sort which begins with wooden and stone culverts, and becomes of better and better quality as time goes on and as brick and sewer-pipe are more largely used. Sewers were built here and there as they were needed in a time of small population, and in many cases were extended later to districts for which their older and lower portions were too small. Additions, alterations, and emendations have been carried out from time to time, according to requirements and according to the changing notions of citizens and of city engineers. Even now, if a sewer is called for by property-owners, it is built without reference to any well-matured plan, but according to a rough judgment of present and future needs. The result, as is indicated by the sewer-map, is a very costly and not very efficient medley of sewers of various sizes, many of which have no record but that based on tradition. The more recent work is, so far as the records of the engineer's office are concerned, well described. Most of these sewers, old and new, are without manholes, and a large proportion of them have their mouths entirely submerged. There is no pretense of ventilation, and the sewer-gas difficulty is as troublesome here as in many of the older eastern cities.

The most palpable controllable nuisance of a few years back was the deficient drainage of the flat eastern district, in which the stock-yards are located; the natural streams were sluggish, many depressed lots were filled with stagnant water, and filth and saturation pervaded the whole district. In 1876 this difficulty was largely remedied by the construction of a very large sewer, built to include the waters of Mill creek, starting in the vicinity of the stock-yards, and delivering into the head or eastern end of the Hamburg canal. This sewer, at its lower part, is 12 feet wide and 9 feet high. Above Swan street it is reduced to 10 feet wide and 6.5 feet high; and thence to its upper line, at the south line of Batavia street, it is reduced to 5 by 7.5 feet, 4.66 by 7 feet, 4.1 by 6.25 feet. Its total length is 11,143 feet. It is one of the most important sewers in the city, and was built at a contract price of \$78,600. The northern drainage area, "Bird Avenue sewer district", north of High street, was next provided with a sewer, called the Bird Avenue sewer, which delivers into the Erie canal at the foot of Bird avenue. This is of recent construction.

The Mill Race sewer and the Bird Avenue sewer were both built under the direction of George E. Mann, esq., city engineer. Although affording relief to the districts to which they furnish outlets, they of course only aggravate the foul condition of the canals. At the present time (1880) the most serious problem in connection with the sewerage of Buffalo is connected with the purification of the Main and Hamburg Street canal. Some relief was secured by the use of forcing-wheels to establish an artificial current, leading to an indraught of fresh water from lake Erie, but the canal is still in a most foul and objectionable condition. Mr. Mann, in 1875, suggested as the only feasible means of remedying the condition of this body of water the construction of a large intercepting sewer, beginning at Mill Race sewer, intercepting all the sewers of the city as far as Albany street, 1 mile above Bird avenue, and delivering there into Niagara river, of which the surface is 4 or 5 feet below the level of the canal.

This project was taken up by J. S. Youngs, esq., city engineer, early in 1880. In March, Mr. Youngs was authorized by the city council to employ "one or more sanitary engineers to examine and assist in perfecting his plans for a proper system of sewerage for the whole city, and especially for a speedy and permanent abatement of the Hamburg Canal nuisance", \$3,000 being appropriated to defray the expenses attending the preliminary work on the plans, or to pay said sanitary engineers. Mr. J. W. Adams, of Brooklyn, and Mr. Moses Lane, of Milwaukee, were selected for this service. Their report, submitted to the city council July 29, 1880, recommended the construction of a sewer along the north bank of the Hamburg canal, thence through private property to the Terrace, through the Terrace and Court street to Fourth street, and thence parallel with the canal to the outlet at Albany street. The cross-section of the sewer at the upper end of the canal was to be equivalent to a circle 11 feet in diameter. At Genesee street the section was increased to the equivalent of 12 feet in diameter, and beyond Pennsylvania street it was to be a full circle 12 feet in diameter. The level of the invert of the sewer at Hamburg street was to be 5 feet below the ordinary level of the canal, and the grade of 1 to 5,000 throughout its length brought its invert at Albany street about 9 feet below the level of the canal and about 4 feet below the ordinary level of the river. It was to be furnished with a flushing-gate at Hamburg street, and another at Ohio Basin slip, securing a strong flow at all times, the amount taken in at Hamburg street being sufficient for the purification of the canal by an equivalent indraught of fresh water from the lake. This sewer was to intercept all of the sewers of the city discharging across its line, and, for relief during storms, overflows were recommended at Georgia, Virginia,

Hudson, Jersey, and Connecticut streets. A subsidiary sewer was recommended to be laid in Genesee street, giving a more direct outflow to the sewage of a large area whose drainage now flows to the Hamburg canal. The estimated cost of this sewer was about \$1,700,000, not including the serious item of right of way.

Final action has not to this time (December, 1880) been taken. The works described above relate exclusively to this principal part of the city, which lies within the angle of the Erie and the Hamburg canals. The more easterly and southerly portions of the city are still little improved in the matter of drainage.

SANITARY AUTHORITY—BOARD OF HEALTH.

By the revised city charter, the board of health of Buffalo is composed of the comptroller, the city engineer, and the president of the common council. In addition to this the board appoints a city health physician, who is associated with it. The annual expenses of the board when there is no declared epidemic is \$12,500, as follows: For salaries of health physician, canal inspector, and pest-house keeper, \$2,916 25; for abating nuisances in Main and Hamburg Street canal, \$6,650; and for incidental expenses, \$2,933 75. In case of an epidemic the expenses of the board are limited to no fixed sum. The authority of the board in ordinary times is confined to recommending to the common council "such work as it deems necessary". By the city charter the board is required to take effectual measures to prevent the entrance of pestilential or infectious diseases into the city, to abate nuisances, and to exercise a general care over the sanitary condition of the city. During epidemics the authority of the board is unlimited. The street commissioner, salary \$2,000 per annum, acts as the executive officer of the board. There are 10 district health physicians and 10 health inspectors appointed by the board, but none of them have police powers. The board meets once a week and disposes of any business brought before it. When nuisances are reported (there being no regular inspections made) the complaint is referred to the street commissioner, "for the purpose of having the same inspected". In the case of defective house-drainage, privy-vaults, cesspools, and sources of drinking-water, the health inspectors examine and report to the board. In case of defective sewerage the board recommends the necessary means of correction to the city council. The board exercises full control over the conservation and removal of garbage. The board has no regulations concerning the pollution of streams and harbors. Excrement is removed by persons who are licensed by the board. Burial permits are granted by the city clerk on certificates of death signed by the attending physician, and these certificates must be presented within 24 hours after death.

INFECTIOUS DISEASES.

All small-pox patients are isolated; either at home, when the house is strictly quarantined and a sign placed on the door, or removed to the public pest-house, situated on Ferry street, in the northeast corner of the city near the city line. Scarlet-fever patients are neither isolated nor quarantined at home. All children sick with contagious diseases are excluded from the public schools, as are also all children who are members of a family in which diseases of a contagious nature exist. Vaccination is compulsory, and of late years it has been done at the public expense.

REGISTRATION AND REPORTS.

Diseases are not registered. A record of all deaths is kept by the city clerk. The board makes no report; the health physician, however, makes an annual report, which is published in pamphlet form for distribution. Dr. A. H. Briggs, health physician, who furnished the above information regarding sanitary matters, writes: "The medical profession are united in the opinion that the board of health should be composed in whole or in part of medical men."

MUNICIPAL CLEANSING.

The following, from the mayor's annual report for 1880, is all that could be obtained regarding the street-cleaning, etc., of Buffalo:

The condition of the streets and alleys during the year has been no worse, and perhaps better, than in former years. The contract for cleaning the same was awarded, covering from May 15, 1880, to May 15, 1881, for the sum of \$17,900. It is pretty certain that the work could not be done any more thoroughly than it has been done, for that sum. * * * To save labor the contractors wet the streets down so as to make the mud very disagreeable to both vehicles and pedestrians; the hot sun then causes sudden and abundant evaporation, deleterious alike to health and comfort. Some of our most enlightened citizens and physicians are loud in condemnation of the system, and it is evident that if the paved streets are properly cleaned and swept, the need of sprinkling, for any purpose, would be removed, while the expense of sprinkling would go far toward meeting the expense of thorough cleaning.

POLICE.

The police force of Buffalo is appointed and governed by the board of police commissioners, a body composed of the mayor *ex officio*, the superintendent of police, and one other person as acting commissioner, who is nominated by the mayor and confirmed by the city council. The mayor, and the acting commissioner appointed by him, meet and select the superintendent of police, who holds office for five years, or until his successor is qualified, and is required to give bonds for the faithful performance of his duties in the sum of \$10,000. If at any time the mayor and the acting commissioner shall fail to agree upon a suitable person, the fact is communicated to the city council

and the president of that body joins with the commissioner for the purpose of selecting a superintendent of police. The superintendent is the chief executive officer, subject to the rules and regulations of the police department and the orders of the board of police; his salary is \$2,300 per annum. The members of the force, in the several grades, and the salaries of each, are as follows: 8 captains and 9 deputies, at \$1,000 a year each; 16 sergeants, at \$850 a year each; and 142 patrolmen and 16 doormen, at \$750 a year each. The uniform consists of a frock coat, pantaloons, and vest of navy-blue cloth, the pantaloons having a white welt on the outer seam, and a navy-blue cloth cap, with wreath surrounding a number in white metal. The men furnish their own uniforms. Locust batons are provided by the department; the members of the force are supposed to carry revolvers, which they furnish themselves. The patrolmen's hours of service are, out of every 48, 18 on street duty, 18 on reserve, and 12 off duty. The force patrols all the streets in the city.

During the year 1880 there were 9,012 arrests made by the police, the principal causes being: Assault and battery, 1,302; burglary, 98; disorderly persons, 125; disorderly conduct, 1,880; drunkenness, 2,535; insanity, 97; larceny (all grades), 863; vagrancy, 1,047; and malicious mischief, 226. They were disposed of by fines, imprisonment, held for trial, turned over to other institutions, and some discharged. The total value of property reported to the police as stolen during the year was \$26,837 53, and of this \$14,713 59 was recovered and returned to the owners. The number of station-house lodgers during 1880 was 3,203, as against 2,497 during 1879. Free meals are not provided for these lodgers. There were 256 lost children found and returned to their homes by the police during the year. By the regulations, the police are required to co-operate with the fire department by attending all fires for the purpose of protecting property and keeping order, and with the health department by reporting all nuisances. Special policemen are appointed by the police board when their services are required. Their pay must not exceed \$3 a day, and, while on duty, they have the same standing as the regular force. The yearly cost of the police force (1880) is \$164,000 58.

FIRE DEPARTMENT.

During the present year the Buffalo fire department has been re-organized and its management placed under the supervision and control of 3 commissioners, appointed by the mayor. For a long time the department had been conducted in part on the paid and in part on the volunteer plan. The volunteer companies have been disbanded, the city buying their effects, and Buffalo now has a paid fire department, the working force of which consists of 187 men, 81 horses, 14 steam fire-engines, 14 hose-carriages, 5 chemical engines, 3 hook-and-ladder trucks, and about 24,500 feet of leather hose. The new arrangement has hardly been in operation long enough to make possible an extended report on the working of the department. It is reasonable to expect, however, that the greater efficiency of a paid over a volunteer department will soon become apparent to the citizens.

PUBLIC SCHOOLS.

The number of buildings employed for school purposes in Buffalo is 53, of which 42 are the property of the districts in which they are located, 5 are rented, and 6 are furnished by charitable institutions in which the schools are maintained for the inmates. Of the buildings owned by the city, 38 are of brick, 3 are of wood, and 1 is of stone. The average number of teachers employed during the year 1880 is 439. The whole number of pupils registered in the several schools in the city during the school year ending December, 1880, was 18,529, and the average daily attendance was 14,822—nearly 80 per cent. of the registration. In his annual report for 1880 (from which the above is taken) the superintendent says:

The number of children of legal school age, or between the age of 5 and 20 years, residing in the city, is estimated at about 50,000; of this number there are probably 33,000 between the age of 5 and 16 years, the usual limits of the age of pupils attending the public and private schools. The number of children attending the public schools in the last year, not including the Central school, in which the pupils will average more than 16 years, was about 14,000, and the number of pupils in parochial and private schools about 9,000, or, in all, 23,000, proving that almost 10,000 children between the age of 5 and 16 years were irregular in attendance at school, wholly deprived or disinclined to accept school privileges. Doubtless a great many of these children are usefully employed, many are unable to attend school for various reasons, but a large proportion of the number are truants, or idle and vicious children, who should be compelled to attend, not the district schools, but schools specially provided for their accommodation.

TRADE AND COMMERCE.

The following summary, regarding the trade and commerce of Buffalo for 1880, is taken from the statistics prepared under the direction of the Buffalo board of trade:

The receipts of flour and grain by lake aggregated 112,053,702 bushels, including flour reduced to its equivalent of wheat. The railroads centering here, with the exception of the Lake Shore and Michigan Southern, do not make any report of their traffic; the receipts of grain by this road, added to the receipts by lake, given above, give a total of 150,241,502 bushels. The exports by lake for the past season included 589,670 tons of coal, 114,125 barrels of cement and plaster, 225,982 barrels and 17,725 tons of salt, and 25,670 tons and 21,084 bars of railroad iron. The first arrivals by lake this season were, steam, March 19, and sail, March 20, both vessels being from Toledo. The Welland canal opened April 30 and closed November 27; the north channel of the straits of Mackinaw opened April 5; the Sault Ste. Marie canal opened April 20 and closed November 15.

COMMERCE AND NAVIGATION.

[From the reports of the Bureau of Statistics for the fiscal years ending June 30.]

Customs district of Buffalo Creek, New York.	1879.	1880.
Total value of imports.....	\$3,307,693	\$3,742,631
Total value of exports:		
Domestic.....	\$224,705	\$325,027
Foreign.....	\$7,791	\$4,958
Total number of immigrants.....	315	1,017

Customs district of Buffalo Creek, New York.	1879.		1880.	
	Number.	Tons.	Number.	Tons.
Vessels in foreign trade:				
Entered.....	473	81,134	576	88,652
Cleared.....	420	70,266	549	81,874
Vessels in lake trade:				
Entered.....	3,444	2,029,269	4,579	2,702,638
Cleared.....	3,523	2,029,402	4,624	2,717,073
Vessels registered, enrolled, and licensed in district.	220	102,102	219	101,257
Vessels built during the year.....	9	1,986	9	2,152

MANUFACTURES.

The following is a summary of the statistics of manufactures of Buffalo for 1880, being taken from tables prepared for the Tenth Census by Silas J. Douglas, chief special agent:

Mechanical and manufacturing industries.	No. of establishments.	Capital.	AVERAGE NUMBER OF HANDS EMPLOYED.			Total amount paid in wages during the year.	Value of materials.	Value of products.
			Males above 16 years.	Females above 15 years.	Children and youths.			
All industries.....	1,183	\$26,847,937	15,033	1,795	1,193	\$7,442,109	\$27,552,086	\$42,937,701
Agricultural implements.....	4	341,500	255			86,773	129,800	423,500
Baking and yeast powders (see also Drugs and chemicals).....	7	38,200	13	1	1	6,950	61,800	79,400
Belting and hose, leather.....	3	120,000	39		21	18,500	285,000	322,000
Billiard tables and materials.....	3	13,500	5		1	3,500	7,100	16,060
Blacksmithing (see also Wheelwrighting).....	59	66,175	65		4	33,227	41,108	121,945
Bookbinding and blank-book making.....	6	73,800	37	44	3	30,600	53,900	104,100
Boots and shoes, including custom work and repairing.....	131	490,146	549	84	47	268,309	579,157	1,068,296
Boxes, fancy and paper.....	4	10,500	10	72	12	15,100	44,190	72,225
Boxes, wooden packing.....	6	27,590	43			14,053	34,550	61,812
Brass castings.....	7	40,600	37		4	18,990	36,378	71,400
Bread and other bakery products.....	59	352,550	238	43	27	125,805	605,993	924,420
Brick and tile.....	9	161,495	226		70	100,750	45,270	201,040
Brooms and brushes.....	8	13,700	16	7	4	8,796	23,379	43,892
Carpentering.....	15	45,600	120			56,780	127,275	224,100
Carriages and sleds, children's.....	3	47,800	29	4		14,000	37,500	75,400
Carriages and wagons (see also Wheelwrighting).....	23	295,900	281		7	143,221	184,081	410,031
Clothing, men's.....	52	1,090,900	649	853	11	576,425	1,798,067	2,747,475
Coffee and spices, roasted and ground.....	5	120,300	22	4	3	11,706	187,000	230,500
Confectionery.....	10	173,700	121	75	17	77,770	262,680	433,800
Cooperage.....	17	251,857	315		26	130,340	232,245	432,162
Cutlery and edge tools (see also Hardware).....	6	98,400	83		14	46,039	50,900	115,100
Dentistry, mechanical.....	7	5,875	6		2	3,635	6,800	22,500
Drugs and chemicals (see also Baking and yeast powders; Patent medicines and compounds). Dyeing and cleaning.....	5	314,600	54	14	1	25,000	137,635	204,900
Engraving, steel.....	4	31,350	12	14	1	4,090	3,230	12,500
Engraving, wood.....	4	4,100	4			2,850	1,100	7,500
Files.....	5	6,600	10			16,100	1,825	30,550
Flouring and grist-mill products.....	5	12,400	32		1	13,625	6,000	20,500
Foundry and machine-shop products.....	7	940,000	120			58,984	2,081,532	2,251,848
Furniture (see also Mattresses and spring beds; Upholstering).....	41	3,080,918	2,011		152	936,543	1,935,038	3,577,029
	33	578,200	371	15	52	218,549	370,005	773,091

Mechanical and manufacturing industries.	No. of establishments.	Capital.	AVERAGE NUMBER OF HANDS EMPLOYED.			Total amount paid in wages during the year.	Value of materials.	Value of products.
			Males above 16 years.	Females above 15 years.	Children and youths.			
Furs, dressed	5	\$85,000	19	37	3	\$14,378	\$86,500	\$136,750
Glucose.....	3	1,750,000	775	5	17	485,000	2,000,000	3,075,000
Hardware (see also Cutlery and edge tools).....	9	230,000	223	8	41	106,025	174,844	382,003
Hats and caps, not including wool hats	6	17,950	12	11	2	6,150	17,050	30,200
Iron and steel	4	1,790,000	688		25	212,278	635,353	887,012
Iron forgings	3	255,000	180		5	69,000	225,000	400,000
Leather, curried	3	93,000	64		2	26,233	429,250	510,500
Leather, tanned.....	7	1,077,000	375		2	140,442	1,446,800	1,757,600
Liquors, malt	28	1,859,975	360			179,962	916,171	1,636,020
Lithographing (see also Printing and publishing).....	4	190,000	128	6	9	99,400	185,910	381,800
Lock and gun-smithing.....	4	4,500	7			4,050	10,850	20,500
Looking-glass and picture frames.....	8	39,700	40	3	8	13,205	45,780	86,700
Lumber, planed (see also Wood, turned and carved).....	17	1,183,000	561		59	243,820	784,541	1,219,406
Malt.....	34	1,342,000	275			91,840	1,512,752	2,002,893
Marble and stone work	21	274,050	477	7	2	189,649	182,829	433,023
Masonry, brick and stone.....	16	27,250	123		6	47,700	50,250	144,350
Mattresses and spring-beds (see also Furniture).....	7	19,098	10	3	3	6,074	31,945	64,032
Musical instruments, pianos and materials	3	46,000	44			22,450	13,114	42,679
Painting and paperhanging.....	29	40,157	175		6	98,070	110,185	258,488
Patent medicines and compounds (see also Drugs and chemicals).....	12	1,098,100	78	47	2	60,471	261,345	654,027
Photographing.....	21	46,500	28	4	7	15,388	13,275	64,800
Plumbing and gasfitting	17	99,300	152		16	77,890	151,500	288,200
Printing and publishing (see also Lithographing).....	31	819,000	424	80	97	261,803	872,318	975,022
Pumps, not including steam pumps.....	4	13,000	19			9,875	7,850	25,200
Refrigerators	4	125,000	212	13	25	88,700	113,500	264,500
Roofing and roofing materials.....	5	19,321	38			13,951	36,791	62,728
Saddlery and harness	31	87,844	93		2	41,483	80,498	165,844
Shipbuilding.....	17	576,500	709			328,390	455,252	859,756
Shirts.....	7	20,800	10	61	2	21,760	24,300	68,500
Slaughtering and meat-packing, not including retail butchering.....	6	872,500	289			170,433	3,023,924	3,441,280
Soap and candles	7	579,000	153	4	48	81,095	881,114	1,176,840
Starch.....	3	245,000	184	40	15	77,691	378,176	625,390
Stereotyping and electrotyping	3	39,000	30		1	26,400	9,600	58,000
Stone and earthen-ware	8	8,500	10			4,675	2,275	17,800
Tinware, copperware, and sheet-iron ware	58	203,050	213		21	115,417	269,470	492,317
Tobacco, cigars and cigarettes.....	40	196,929	250	11	41	114,470	241,758	464,946
Trunks and valises	6	38,600	43		1	16,596	43,500	79,800
Upholstering (see also Furniture).....	6	4,450	5		1	1,960	8,200	15,600
Vinegar.....	6	52,100	18			9,842	53,406	84,200
Watch and clock repairing	16	18,000	25		3	14,538	10,493	42,099
Wheelwrighting (see also Blacksmithing; Carriages and wagons).....	35	83,325	72		4	31,795	38,654	107,603
Wirework.....	5	119,800	93	10	42	55,305	114,614	203,500
Wood, turned and carved (see also Lumber, planed).....	5	46,000	86	6	19	35,910	56,630	115,526
All other industries (a).....	81	2,204,382	1,490	214	175	643,535	2,663,781	4,028,591

a Embracing artificial limbs; awnings and tents; baskets, rattan and willow ware; bluing; boot and shoe findings; boot and shoe uppers; boxes, cigar; bridges; carriage and wagon materials; cars, railroad, street, and repairs; coffins, burial cases, and undertakers' goods; cordage and twine; dentists' materials; drain and sewer pipe; electrical apparatus and supplies; electroplating; envelopes; fertilizers; flavoring extracts; fruits and vegetables, canned and preserved; furniture; chairs; glass, cut, stained, and ornamented; gloves and mittens; glue; gold and silver leaf and foil; gold and silver, reduced and refined; grease and tallow; hairwork; housefurnishing goods; ink; iron bolts, nuts, washers, and rivets; iron pipe, wrought; iron railing, wrought; iron work, architectural and ornamental; jewelry; lasts; lead, bar, pipe, sheet, and shot; liquors, distilled; lumber, sawed; mantles, slate, marble, and marbleized; millinery and lace goods; models and patterns; musical instruments, organs and materials; oil, linseed; oil, lubricating; paints; paperhangings; paving materials; perfumery and cosmetics; scales and balances; show-cases; silversmithing; springs, steel, car, and carriage; stamped ware; stencils and brands; toys and games; type founding; umbrellas and canes; whips; and window blinds and shades.

From the foregoing table it appears that the average capital of all establishments is \$22,694 79; that the average wages of all hands employed is \$412 97 per annum; that the average outlay in wages, in materials, and in interest (at 6 per cent.) on capital employed is \$30,942 58.